

# **Energy Commission Specialist I and II (Tech Evaluation and Development)**

Exam Code: 7PB26

Department(s): State of California

Opening Date: 10/13/2017 Final Filing Date: Continuous

Type of Examination: Departmental, Open

# **CLASSIFICATION DETAILS**

Energy Commission Specialist I - \$5,488 - \$6,820 per Month Energy Commission Specialist II - \$6,028 - \$7,491 per Month

# Who Should Apply:

Applicants who meet the minimum qualifications as stated on this bulletin may apply and take this Training and Experience Evaluation at any time.

Once you have taken the Training and Experience Evaluation, you may not retake it for **12** months.

## How to Apply:

The link to connect to the Training and Experience Evaluation is located further down this bulletin under the "Taking the Exam" area.

# MINIMUM QUALIFICATIONS

All applicants must meet the education and/or experience requirements as stated on this exam bulletin to be accepted into the examination. Part-time or full-time job, regardless of whether the job was a paid or volunteer position or was within or outside of State service will count towards experience.

Qualifying experience may be combined on a proportionate basis if the requirements stated below include more than one pattern and are distinguished as 'Either' I 'or' II,

etc. For example, candidates who possess qualifying experience amounting to 50% of the required time of Pattern I, and additional experience amounting to 50% of the required time of Pattern II, may be admitted to an examination as meeting 100% of the overall experience requirement.

# **Energy Commission Specialist I**

## Either I

In the California state service, one year of experience performing technology evaluation and development duties in <u>areas related</u> to energy technologies, energy research, development and demonstration projects; advanced combustion technologies; transportation energy technologies and alternative fuels; efficiency improving energy technology and fuels; including duties such as analysis of economic, environmental and public health impacts in California at a level of responsibility equivalent to Associate Energy Specialist.

## Or II

Four years of responsible technical experience in one or more of the areas described in Pattern I above, including three years of experience above the trainee level. A master's degree in a field related to one of the specialties may be substituted for one year of experience; while a doctoral degree may be substituted for two years of the required experience. Only one postgraduate degree may be counted towards experience. (Completion of dissertation research for a doctoral degree in a field appropriate to one of the Energy Commission specialties may be substituted for up to one year of the required experience).

(Experience in the California state service applied toward this pattern must include at least one year performing the duties in a class with a level of responsibility equivalent to Associate Energy Specialist.)

## AND

**Education:** The following education is required when non-California state service experience is used to qualify at any level. Equivalent to graduation from college. Additional experience may be substituted for the required education on a year-for-year basis.

# **Energy Commission Specialist II**

## Either I

In the California state service, one year of experience performing technology evaluation and development duties in <u>areas related</u> to energy technologies, energy research, development and demonstration projects; advanced combustion technologies; transportation energy technologies and alternative fuels; efficiency improving energy technology and fuels; including duties such as analysis of economic, environmental and public health impacts in California at a level of responsibility equivalent to Energy Commission Specialist I.

## Or II

Two years of experience in the California state service performing technology evaluation

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and development duties in areas related to energy technologies, energy research, development and demonstration projects; advanced combustion technologies; transportation energy technologies and alternative fuels; efficiency improving energy technology and fuels; including duties such as analysis of economic, environmental and public health impacts in California at a level of responsibility equivalent to Associate Energy Specialist.

#### Or III

Five years of responsible technical experience in one or more of the areas described in Pattern I above, including four years of experience above the trainee level. A master's degree in a field related to one of the specialties may be substituted for one year of experience; while a doctoral degree may be substituted for two years of the required experience. Only one postgraduate degree may be counted towards experience. (Completion of dissertation research for a doctoral degree in a field appropriate to one of the Energy Commission specialties may be substituted for up to one year of the required experience.)

(Experience in the California state service applied toward this pattern must include at least one year performing the duties in a class with a level of responsibility equivalent to ECS I).

# **AND**

<u>Education</u>: The following education is required when non-California state service experience is used to qualify at any level. Equivalent to graduation from college. Additional experience may be substituted for the required education on a year-for-year basis.

## POSITION DESCRIPTION

The Energy Commission Specialist I positions are characterized by incumbents independently performing more complex, sensitive and responsible energy-related work which requires, on a regular basis, a high level of knowledge, skill and ability which is demonstrably above the journey level. Incumbents in this class will usually possess technical expertise in one or more energy-related fields. Incumbents perform a broad range of duties within the program specialty. Incumbents may exercise some lead responsibility as Project Managers. Incumbents may be responsible for minor Commission reports and may lead other Energy Commission Specialists I in carrying out project responsibility.

The Energy Commission Specialist II positions are identified by top Commission management as requiring the service of the most highly skilled practitioners who serve as prime resources and innovators in energy-related subjects which are the most sensitive and complex due to the rapid development in the subject area, extremely high legislative and media attention and multi-state impact. Incumbents provide expert guidance on highly complex and technical problems; and provide expert consultation services within their area of expertise. Incumbents may also serve as project leaders to address broad national issues such as global warming. Such major projects are characterized by their

multidisciplinary scope and interstate impact.

## **EXAMINATION SCOPE**

This examination consists of the following components:

Training and Experience Evaluation – Weighted 100%.

A final score of 70% must be attained to be placed on the eligible list.

In addition to evaluating the applicant's relative knowledge, skill, and ability as demonstrated by quality and breadth of education/experience, emphasis in each test component will be on measuring competitively, relative job demands, each applicants':

Questions in the T&E Questionnaire are designed to test broad knowledge of the topic under consideration and candidates should be prepared to respond to a wide variety of issues, both technical and procedural.

# **Energy Commission Specialist I and II - Knowledge of:**

- 1. A wide range of energy technologies and associated deployment and use issues;
- 2. Energy supply and demand forecasts and analytic methodologies, energy policy issues affecting or resulting from energy technology development, and energy project management techniques;
- California Public Resource Code pertaining to energy resources conservation and development;
- 4. Principles of physical sciences and engineering involved in energy resource development, conversion, distribution, and conservation;
- 5. Principles of econometric and end-use energy demand forecasting;
- 6. Energy sources and use within the California economy;
- 7. Principles of engineering economics, financial analysis, and economic theory as it pertains to energy supply and demand:
- 8. Energy technology costs and cost-accounting methods;
- 9. Recent research and development projects related to the use of petroleum, natural gas, biomass and other synthetic fuels;
- 10. Energy technology environmental impacts, including emissions, waste streams, volumes and characteristics;
- 11. Energy technology public health impacts, air quality impacts and risk analysis;
- 12. General provisions of social and economic implications of geothermal, solar, wind and other renewable energy development, technology and fuel demonstrations, resource planning and facility construction;
- 13. Recent research and development projects in electrical, nuclear, geothermal, and other energy sources and their related fuels and technologies;
- 14. Federal and State energy policy;
- 15. Decision theory, probabilistic risk assessment, and techniques of comparative

evaluation, and Federal, State and local government, utilities and private agencies in energy research and regulation.

# **Energy Commission Specialist II Only - Knowledge of:**

- 1. A variety of analytical and research techniques to resolve complex and policy sensitive issues and technical problems;
- 2. Significant trends and issues reported in the energy literature;
- 3. Theory and practice of utility planning and regulation, in general, and as implemented in California:
- 4. Energy efficiency, conservation, planning, forecasting and research methods including problem definition, data acquisition, and analytical techniques;
- 5. Other Federal, State and local energy related environmental goals, policies and organizations.

# **Energy Commission Specialist I and II - Ability to:**

- 1. Reason logically and creatively, evaluate and apply a variety of analytical and research methods for the purpose of systematic, critical, and thorough analysis of energy problems or prospective issues leading to formulation, testing, or revision of State and/or Federal energy policies;
- 2. Utilize available computer systems for data base and/or computational applications;
- 3. Manage contracts;
- 4. Analyze energy data and present ideas and information effectively both orally and in writing;
- 5. Communicate in both written and oral formats;
- 6. Prepare and give testimony in planning and regulatory proceedings;
- 7. Develop and use complex computer programs and analytic models;
- 8. Develop and evaluate fuel alternatives;
- 9. Gain and maintain the confidence and cooperation of those contacted during the course of work;
- 10. Evaluate and quantify the effect of research, development and demonstration programs on energy systems;
- 11. Analyze situations accurately and take effective actions, and act independently within the guidelines set forth by the Commission;
- 12. Present ideas and analysis cogently and effectively;
- 13. Consult with and advise other staff, management, Commissioners, or others on the relative merits of specific energy technologies and the impact of various energy policies.

# **Energy Commission Specialist II Only - Ability to:**

- Coordinate the complex technical work of others, act as a team or conference leader to analyze the more technical and complex situations accurately and take effective action;
- 2. Establish and maintain project priorities;
- Testify as subject matter expert (geothermal, solar, wind and other renewable energy development, technology and fuel demonstrations, recent research and development projects in electrical, nuclear, geothermal, and other energy sources and their related fuels and technologies) before the Commission and other groups;

- 4. Serve as the Commission's top adviser in such areas;
- 5. Effectively employ computer techniques for problems solving;
- 6. Consult with and advise Office Managers, Division Administrators, Commissioners and other interested members of State energy community on a wide variety of energy forecasting, modeling and fuel-related issues and topics.

## **ELIGIBLE LIST INFORMATION**

A Servicewide, Open eligible list for the Energy Commission Specialist I and II Classification will be established for:

State of California (All California departments statewide)

The names of successful competitors will be merged onto the eligible list(s) in order of final score regardless of test date. Eligibility expires **12** months after it is established. Applicants must then retake the examination to reestablish eligibility.

## Veterans' Preference

Veterans' Preference will be granted for this examination. In accordance with Government Codes 18973.1 and 18973.5, whenever any veteran, widow, or widower of a veteran achieves a passing score on an open examination, he or she shall be ranked in the top rank of the resulting eligibility list.

Veteran status is verified by the California Department of Human Resources (CalHR). Information on this program and the Veterans' Preference Application Form (Std. 1093) is available <u>online</u>. Additional information on Veteran benefits is available at the Department of Veterans Affairs.

Career Credits are not granted for examination(s) administered on an Open basis or Promotional basis.

## **EXAMINATION INFORMATION**

# **Examination Questions Review**

## PREPARING FOR THE EXAMINATION

Here is a list of suggested resources to have available prior to taking the exam.

**Employment History:** Employment dates, job titles, organization names and addresses, names of supervisors or persons who can verify your job responsibilities, and phone

numbers of persons listed above.

**Education:** School name and addresses, degree(s) earned, date(s) attended, courses taken (Verifiable on a Transcript), person or office who can verify education and phone numbers of persons listed above.

**Training:** Class titles, certifications received, name of person who can verify your training and their contact information.

# TAKING THE EXAM

Take the online <u>Training and Experience Evaluation</u> for the Energy Commission Specialist 1 and 2 classification.

## TESTING DEPARTMENTS

State of California

## CONTACT INFORMATION

State of California
Department of Human Resources
CalCareer Service Center
1515 "S" Street, North Bldg.
Sacramento, CA 95814
Phone: (866) 844-8671
CalCareer@CalHR.CA.GOV

California Relay Service: 1-800-735-2929 (TTY), 1-800-735-2922 (Voice) TTY is a Telecommunications Device for the Deaf, and is reachable only from phones equipped with a TTY Device.

## **EQUAL OPPORTUNITY EMPLOYER**

The State of California is an equal opportunity employer that actively pursues and hires a diverse workforce. All qualified applicants will receive consideration for employment without regard to age, ancestry, color, disability (mental or physical), gender identity or expression, genetic information, marital status, medical condition, military veteran status, national origin, political affiliation, pregnancy, race, religion or creed, sex, sexual orientation, or any other factor that is not related to the job.

## DRUG FREE STATEMENT

It is an objective of the State of California to achieve a drug-free State work place. Any applicant for State employment will be expected to behave in accordance with this objective, because the use of illegal drugs is inconsistent with the law of the State, the rules governing civil service and the special trust placed in public servants.

## **GENERAL INFORMATION**

Examination and/or Employment Application (STD 678) forms are available at the California Department of Human Resources, local offices of the Employment Development Department, and through your CalCareer Account (www.CalCareers.ca.gov).

If you meet the requirements stated on this examination bulletin, you may take this competitive examination. Possession of the entrance requirements does not assure a place on the eligible list. Your performance in the examination described in this bulletin will be rated against a predetermined job-related rating, and all applicants who pass will be ranked according to their scores.

California Department of Human Resources (CalHR) reserves the right to revise the examination plan to better meet the needs of the service, if the circumstances under which this examination was planned change. Such revision will be in accordance with civil service laws and rules and all applicants will be notified.

General Qualifications: Applicants must possess essential personal qualifications including integrity, initiative, dependability, good judgment, the ability to work cooperatively with others, and a state of health consistent with the ability to perform the assigned duties of the class. A medical examination may be required. In open examinations, investigation may be made of employment records and personal history and fingerprinting may be required. Eligible Lists: Eligible lists established by competitive examination, regardless of date, must be used in the following order: 1) sub-divisional promotional, 2) departmental promotional, 3) multi-departmental promotional, 4) service-wide promotional, 5) departmental open, 6) open. When there are two lists of the same kind, the older must be used first. Eligible lists will expire in one to four years unless otherwise stated on the bulletin.